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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/709,468	05/07/2004	Bill Yang	13050-US-PA	3467
31561	7590	08/07/2006	EXAMINER	
JIANQ CHYUN INTELLECTUAL PROPERTY OFFICE 7 FLOOR-1, NO. 100 ROOSEVELT ROAD, SECTION 2 TAIPEI, 100 TAIWAN			LUKS, JEREMY AUSTIN	
			ART UNIT	PAPER NUMBER
			2837	

DATE MAILED: 08/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.		Applicant(s)	
	10/709,468		YANG, BILL	
	Examiner		Art Unit	
	Jeremy Luks		2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 May 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-2, 6-7 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Hawker (5,790,679). Hawker teaches a speaker module (Figure 3, #26) (Col. 3, Lines 31-34), suitable for a handheld electronic device (Col. 2, Lines 1-13), comprising a speaker module frame (28) having a main portion having an accommodating hole (34), said accommodating hole accommodating a microspeaker (Figures 1 and 3, #20); and an extending portion (Examiner is referring to the portions of frame #28 (Figure 3) that extend left and right beyond accommodating hole #34), extending from a side of said main portion to form a fixed resonance space (30) for said microspeaker (20); a front cover (36), disposed at a first side of said speaker module frame, a front sound enclosure (labeled front enclosure) being formed between said front cover (36) and said speaker module frame (28), defining the resonance space (30), said front cover (36) having a plurality of tone holes (40, 42); and a rear cover (38), disposed at a second side of said module frame (28), said second side being opposite to said first side, a rear sound enclosure (labeled back enclosure) being formed

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between said rear cover (38) and said speaker module frame (28); and wherein the area of resonance space (30) is larger than the area of said microspeaker (20).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3, 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawker (5,790,679) in view of Dyer (6,688,421). Hawker is relied upon for the reasons and disclosures set forth above. Hawker fails to teach wherein said speaker module frame includes a plurality of positioning slices extending from a sidewall of said accommodating hole to a center of said accommodating hole for positioning said microspeaker. Dyer teaches a speaker module frame (Figure 3, #101) including a plurality of positioning slices (350) extending from a sidewall of said accommodating hole (104) to a center of said accommodating hole (104) for positioning a speaker (Col. 4, Lines 21-30). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Hawker, with the apparatus of Dyer to more securely hold the speaker within the module, while allowing for easier insertion and removal if a replacement speaker is needed.

3. Claims 4-5, 9-10 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hawker (5,790,679) in view of Croft (2002/0191808). Hawker is

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relied upon for the reasons and disclosures set forth above including a microspeaker (Figure 3, #20). Hawker fails to teach wherein said microspeaker includes a speaker vibration film having a coil and a magnetic loop. Croft teaches a speaker including a speaker vibration film (Figure 5, #21) having a coil (26) (Page 10, [0129]) and a magnetic loop (Figure 26, #40) (Page 13, [0156]).). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the apparatus of Hawker, with the apparatus of Croft to increase the efficiency of the speaker and therefore create a reduction in power requirements allowing for high acoustic outputs in a smaller size with out prematurely reaching thermal limits.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pertinent arts of record relating to electronic devices with speaker modules therein are disclosed in the PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy Luks whose telephone number is (571) 272-2707. The examiner can normally be reached on Monday-Thursday 8:30-6:00, and alternating Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Jeremy Luks
Patent Examiner
Art Unit 2837



LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER